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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,446	03/25/2004	Edward Raymond Dowski JR.	420228	8923
30955	7590	04/17/2006		
LATHROP & GAGE LC 4845 PEARL EAST CIRCLE SUITE 300 BOULDER, CO 80301				
			EXAMINER HARRINGTON, ALICIA M	
			ART UNIT 2873	PAPER NUMBER

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/810,446	<b>Applicant(s)</b> DOWSKI, EDWARD RAYMOND	
	<b>Examiner</b> Alicia M. Harrington	<b>Art Unit</b> 2873	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-8,10-12,14,16-19,21 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-8,10-12,14,16,17 and 21 is/are allowed.
- 6) ☒ Claim(s) 18,19 and 23-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 18,19,23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al (US 2003/0142877) in view of Mikset et al (Us 6,714,361).

Regarding claims 18, 23,25,26,27,28, and 29, George discloses an optical imaging system comprising at least one optical phase filter including a phase mask (see section 15); and a controller for positioning the optical phase filter to alter the phase of a wave front of the imaging system (user inserts the filter in the lens system of the camera) to change at least a selected one of depth of field and aberration tolerance (see section 12 for example); wherein the phase mask implements phase function and post processing is used to reverse the effects induced by the optical phase filter (see sections 20,37-40 and 53). However, George fails to specifically disclose the optical phase filter is moveable/repositioned during imaging.

In the same field of endeavor, Mikset discloses image blurring effects in the optical imaging system can be implemented using to optical lenses that rotate (move/reposition) to produce distorted images (see col. 3, lines 1-15, col. 4, lines 1-35).

Mikset also teaches constants and functions of phase filter can be change to produce a desired effect. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify George, as taught by Mikset to control the imaging effects and depth of field.

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cubic phase function, since PSF functions of the cubic phase can be simulated to manipulate the images in digital correction.

Regarding claim 19, as discussed above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the phase mask as a cubic phase function. The claimed formula would also be within the skill of ordinary skill in the art, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesh, 617 F.2d.272, 205 USPQ 215(CCPA 1980).

Regarding claim 24, George and Mikset fail to teach automation. However, In re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) .The court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide automation in moving the phase filter, to provide a more accurate and steady movement.

***Allowable Subject Matter***

3. Claims 1,3-8,10-12,14,16,17,21 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 1,4,10,11, prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the dependent claims, in such manner that a rejection under 35 U. S.C 102 or 103 would be proper. The prior art fails to teach the optical imaging system of claim 1, further comprising a user interface for selecting on a magnitude of at least one of the image properties and a controller, responsive to user selections at the interface, to direct the controller to position the optical phase filter and affect the magnitude as claimed.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Harrington whose telephone number is 571 272 2330. The examiner can normally be reached on Monday - Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571 272 2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alicia M Harrington  
Primary Examiner  
Art Unit 2873

AMH